

**DETERMINATION OF SIGNIFICANCE
AND REQUEST FOR COMMENT ON SCOPE OF EIS**
(WAC 197-11-980)

AND

**PUBLIC NOTICE OF APPLICATION for
STATE OF WASHINGTON WATER QUALITY CERTIFICATION**
(WAC 173-225)

October 24, 2001

NOTE: This public notice is requesting comments on both the scoping of an EIS and the notice of application for a 401 Water Quality Certification for the proposed project. Deadline for comments is **November 21, 2001**.

Description of the Proposal – PacifiCorp has requested the Federal Energy Regulatory Commission (“FERC”) to approve a Settlement Agreement which would terminate operation of the Condit hydroelectric project in October 2006 and remove the Condit Dam between 2006 and 2007, which is located on the White Salmon River in Skamania and Klickitat Counties, Washington. This is referred to as the Condit Dam Removal Project (“Project”). For details on the continued operation of the dam until removal see attachment No. 1. In connection with that proceeding and the proposed dam removal (attachment No. 2), PacifiCorp has applied to the Department of Ecology (Ecology) for a section 401 certification under the Clean Water Act. Ecology has also determined that a stormwater NPDES permit under the Clean Water Act, which Ecology has state jurisdiction to issue, will likely be required for the Project.

Ecology has determined that an environmental impact statement (“EIS”) will be required for the Project pursuant to Chapter 43.21C RCW. The Federal Energy Regulatory Commission prepared an EIS in connection with its decision on relicensing the hydroelectric project. Ecology has determined that supplemental environmental review needs to be completed to address aspects of the dam removal project not covered by the 1996 EIS.

Proponent - PacifiCorp Electric Operations (PacifiCorp), 825 N.E. Multnomah, Portland, Oregon 97232

SEPA WAC 197-11-980 Determination of significance and scoping notice (DS)

Lead Agency – Department of Ecology (Ecology)

As the lead agency Ecology determined this proposal is likely to have a significant adverse impact on the environment. An environmental impact statement (EIS) is required under RCW 43.21C.030 (2)(c) and will be prepared. Information related to the project, including materials indicating likely environmental impacts, can be reviewed at our Yakima (15 West Yakima Avenue, Ste 200) and Lacey (300 Desmond Drive) offices as well as on our website listed at the end of this notice.

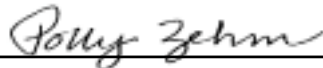
The lead agency has identified the following areas for discussion in the EIS:

1. Dam removal
2. Sediment removal
3. Impacts to the Environment
 - Geology, Soils, and Sedimentation
 - Water Resources (Quality and Quantity)
 - Hydrogeology in the vicinity of the lake
 - Location and water levels in groundwater wells in the vicinity of the lake
 - Surface water rights for water from the lake and status
 - Status of dam's water rights
 - 303(d) listed status of White Salmon and Columbia Rivers
 - Aquatic Resources
 - Morphology of existing river downstream
 - Pre-dam river morphology under existing lake
 - Wetlands
 - Threatened and Endangered Species
 - Updated status of fish and other ESA listed and proposed species
 - Land Use/Critical Areas
 - Recreation
 - Aesthetics, Visual and Scenic
 - Air Quality, Noise and Vibration of Blasting
 - Public Safety
 - Solid Waste Disposal

Scoping. Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS. You may comment on alternatives, mitigation measures, probable significant adverse impacts, and licenses or other approvals that may be required. The deadline for giving us your comments is: **November 21, 2001**

Contact – Loree' Randall (360) 407-6068 or email lora461@ecy.wa.gov

EIS Responsible Official - Polly Zehm, Ecology, Central Regional Director
15 W Yakima Ave, Suite 200
Yakima WA 98902-3452
509 575-2800

Date: 10/16/01 Signature: 

Water Quality Certification (Section 401 of the federal Clean Water Act):

Interested parties are hereby notified, pursuant to the requirements of WAC 173-225, that PacifiCorp submitted an application on June 15, 2001 to Ecology for a water quality certification in accordance with Section 401 of the federal Clean Water Act. This public notice is intended for public review and comment and does not signify either approval or disapproval of the project by Ecology.

The decision to issue, deny or condition the WATER QUALITY CERTIFICATION (WQC) will be based on the following: the proposed project must comply with the applicable provisions of the federal Clean Water Act and appropriate State aquatic protection requirements.

Any comments received will be considered in Ecology's decision whether to approve, condition, or deny a certification for the proposed work.

APPEALS: If the water quality certification is issued, any person aggrieved may obtain review thereof by appeal. The applicant can appeal up to 30 days after receipt of the permit, and all others can appeal up to 30 days from the postmarked date of the permit. The appeal must be sent to the Washington Pollution Control Hearings Board, PO Box 40903, Olympia WA 98504-0903. Concurrently, a copy of the appeal must be sent to the Department of Ecology, Enforcement Section, PO Box 47600, Olympia WA 98504-7600. These procedures are consistent with the provisions of Chapter 43.21B RCW and the rules and regulations adopted thereunder.

Comments for both the scoping and WQC should reach this office by November 21, 2001. Comments should be sent Attn: Loree' Randall, Department of Ecology, PO Box 47600, Olympia WA 98504-7600 or faxed to (360) 407-6904.

More information can be obtained on the Department of Ecology Water Quality Program web site at: [www.ecy.wa.gov/programs/wq/stormwater/condit_dam]

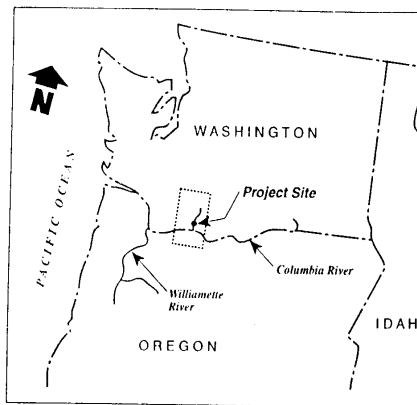
ATTACHMENT NO. 1

CONDIT DAM HYDROELECTRIC PROJECT - OPERATIONS

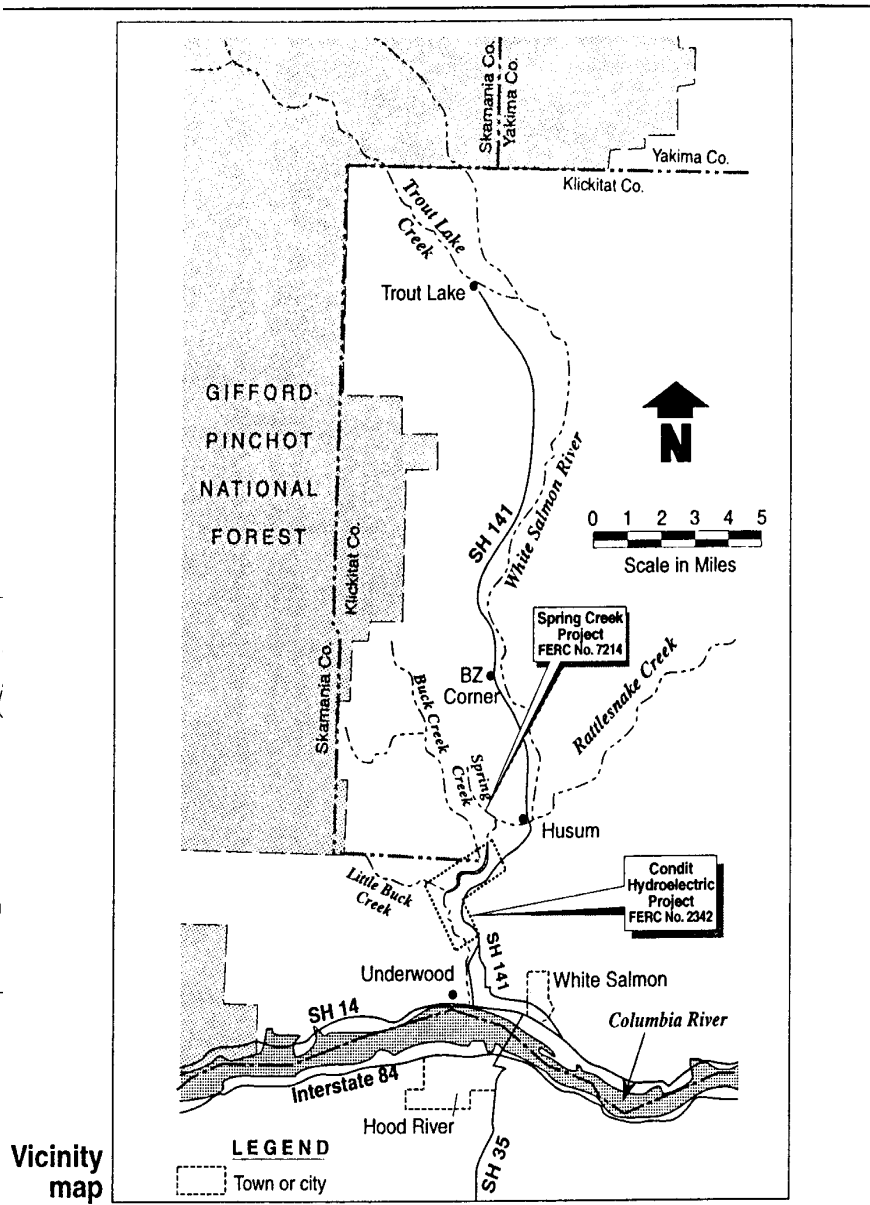
Excerpted from: PacifiCorp's Application for New License, Volume 1, Exhibit A and B

EXISTING SITE INFORMATION:

Condit Dam is located on the White Salmon River near White Salmon, Washington approximately 3.3 miles upriver from the confluence with the Columbia River. The dam is founded in a narrow steep canyon on sound basalt rock which has no significant structural discontinuities. The associated reservoir, Northwestern Lake, has a surface area of 92 acres.



Location map
No scale



EXISTING PROJECT STRUCTURE:

The dam is a concrete gravity structure 125 ft high and 471 ft long and includes:

- a 250 ft long spillway including:
 - A 10 ft high 167 ft long Obermeyer gate for reservoir elevation control
 - five 10 ft by 10 ft radial gates
 - one 6 ft slide gate
- a gated intake structure located adjacent to the left abutment including five 9.5 foot square openings with individual timber slide gates
- a diversion tunnel
- two low level sluice gates
- a 90 ft concrete gravity section at the west end of the dam
- a concrete gravity section and a concrete wall at the east end of the dam, between the intake and the left abutment

Water Conveyance System Water is conveyed from the intake structure at the dam to the powerhouse through a woodstave flowline, concrete surge tank and two penstocks.

Powerhouse The Condit Powerhouse is located on the east bank of the White Salmon River and is approximately 150 ft long and 75 ft wide. The powerhouse is served by an electrically powered 40 ton bridge crane. The powerhouse tailrace consists of a concrete lined outlet channel immediately downstream of the powerhouse, followed by a rectangular shaped open concrete channel which runs along the east bank of the river and ends in a large natural pool approximately 350 ft downstream of the powerhouse.

Other project works located at the dam include:

- A 20 kW propane fueled emergency power generator located on the dam's east non-overflow section;
- A concrete block gage house located at the east end of the intake structure;
- A floating dock located on the reservoir east of the intake structure supporting a 20 hp, 250 gallons per minute (gpm) vertical turbine pump. (The pump and supporting dock are owned by the Mt. Adams Orchard Company and are used to provide irrigation water for acreage east of the Condit Project. Although within the Condit project boundary, these facilities are not part of the Condit Hydroelectric Project);
- A log boom, attached at the left abutment adjacent to the intake racks, extending across the reservoir just upstream of the dam and attached at the west end of the dam; and
- A floating fish rearing net pen immediately upstream of the intake structure. This facility consists of a dock approximately 30 ft square which supports a 20 ft square by 13 ft deep net pen. (This net pen is used under a cooperative program between PacifiCorp, the Washington Department of Wildlife and the White Salmon Steelheaders to raise steelhead smolts for release into the lower White Salmon River. The net pen facility is owned by PacifiCorp, however, it is not part of the Condit Hydroelectric Project.).

CURRENT PROJECT OPERATION

The Condit Project operation is currently semiautomatic. PacifiCorp employs a resident operator and a maintenance man/relief operator to oversee daily operation and maintenance of the project.

The generators are manually synchronized to the system by the operator. Once on line, operation control is accomplished remotely from the Hydro Control Center in Ariel, Washington, which is staffed 24 hours per day. The units are loaded to meet system demand consistent with the project environmental, recreational and other restraints. Hydro Control has the capability to remotely shutdown or vary the load on both units and can control two of the five spillway radial gates. These operations are the same during adverse, mean, and high water years.

License Constraints: License Article 28 requires a minimum discharge of 15 cubic feet per second (cfs) from Condit Reservoir into the White Salmon River. This flow is normally provided by releases from the dam's easterly vertical slide gate.

Article 29 of the Condit license requires "between September 1 and October 15 of each year, the Licensee shall so regulate releases from the dam that fluctuations and river surface levels downstream from the powerhouse shall be no greater than 2.5 ft in any 24 hour period as measured by U.S. Geological Survey gaging station near Underwood, Washington". This requirement is to facilitate the operation of the U.S. Fish and Wildlife Service (USFWS) fish facility located 0.3 miles downstream of the Condit Powerhouse. PacifiCorp's Standard Operating Procedure (SOP) for the Condit Project directs the operators, in the event of a total plant trip, to open spillway gates No. 1 and No. 2 to maintain a sufficient discharge to minimize the river fluctuation.

Non-License Constraints: The operation of the USFWS facility has been expanded to include some fish rearing activity on nearly a continuous basis. As a matter of cooperation, PacifiCorp has voluntarily extended the river level fluctuation restraints contained in Article 29 to essentially a constant mode of operation although, during periods of high runoff, the project cannot control the rate of river elevation rise or fall. The SOP directs the operators to check with the Spring Creek National Hatchery, which oversees the operation of the USFWS facility, whenever it is necessary to schedule flows downstream of the Condit Powerhouse at or below 250 cfs.

Operation Mode: The Condit Project has, in recent years, been operated mostly as a run-of-river facility. During the 78 years of operation since the construction of the Condit Project, the reservoir has significantly "silted in" leaving approximately 665 acre-feet¹ of usable storage. Historically, during periods when the available flow is at or above the level to efficiently load both units, the project has been operated at or near a full reservoir condition.

¹ 1 acre-foot equals 1 acre of surface area covered with 1 foot of water

ATTACHMENT NO. 2

CONDIT HYDROELECTRIC PROJECT - REMOVAL

Excerpted from:
Condit Hydroelectric Project
FERC No. 2342 Removal Plan Summary

REMOVAL PLAN ELEMENTS

Dam Removal.

The removal of Condit Dam would be accomplished by excavating a drain tunnel through the concrete base of the dam to rapidly drain the reservoir and to allow the dam to be removed in quarried blocks of concrete using conventional construction techniques.

The drain tunnel is to be 12 feet high by 18 feet wide and would be excavated using drilling and explosives at the base of the dam, at elevation 174. The tunnel size is capable of passing 10,000 cfs. Concrete excavated from the tunnel would be transported to a spoil area adjacent to the dam by trucks that are loaded by a rough-terrain crane. An access road would be constructed to the existing spillway apron deck. The last 15 feet of the tunnel would be drilled and blasted, allowing the reservoir and impounded sediments to be sluiced through the tunnel, lowering the reservoir to stream level in about 6 hours.

Prior to this final tunnel blast, a barge mounted clamshell crane would be floated in front of the dam to excavate sediment and debris from the area in front of the projected tunnel hole-through. When the area has been sufficiently cleaned out, the crane and barge would be removed from the reservoir and the final tunnel blast would be detonated to drain the reservoir. Should the tunnel plug with woody reservoir debris, measures would be taken to clear the jam.

To allow anadromous fish to pass the site during the dismantling of the dam, a series of protective fish pockets would be excavated in each of the walls of the tunnel to allow a place for fish to rest during their passage upstream.

Concrete excavation of the dam would proceed in the dry and start at the East End of the dam. Using drilling and explosives, concrete blocks with dimensions of 10 feet high by 4 feet deep by 6 feet wide would be removed with a highline yarder-type system to trucks for transport to the spoil area. The block size was selected to minimize the cost of excavation and hoist capacity, which would require average lifts of about 33,600 lbs.

Construction would proceed across the dam in a series of top slicing cuts at ten-foot vertical intervals. The very top cut and the front and back faces of the dam in each cut would be drilled and blasted into blocks and loaded into trucks with an excavator and hauled off the dam. As the top slice cuts progress downward and the dam widens, the center section would be drilled and

blasted into rubble much like a highway rock cut excavation. The concrete rubble would be loaded into trucks with an excavator and hauled off the dam. This procedure would significantly decrease the cost of concrete demolition.

As the top slice cuts across the top of the dam progress downwards below elevation 225, the existing river channel gets narrow and steep. At this point a crane would be set up on the spillway slab to hoist concrete from this lower area. As the excavation reaches the level of the drain tunnel, the center portion of the area adjacent to the tunnel would be excavated down to bedrock leaving sections of intact concrete along the edge of the tunnel and along the front and back faces of the dam to hold the water out. When the center section is completely excavated to bedrock, the edge sections are blasted into blocks and hoisted out of the river channel. This should put the river down to its original channel. Lastly, the area around the drain tunnel is excavated in a similar method. This work must be scheduled during low river flows in order to perform a good job of removing the concrete from the footprint of the dam in this lower section. An earlier proposal for Project removal called for a gate to be fitted to the dam drain tunnel to control releases. Based on subsequent studies of sediment removal and with the concurrence of involved parties, it was decided as reflected in the Condit Hydroelectric Project Removal Summary Report (May 1998) that a more rapid removal of the sediments was preferred.

Appurtenant Facilities Removal

In addition to removing the concrete gravity dam including its Obermeyer crest spillway gate and other spillway and intake gates, demolition of the Project facilities also would involve removal of the upstream cofferdams, wood stave pipeline, steel surge tank, and the wooden and steel penstocks.

Upstream Cofferdams: Photographs and drawings show that the cofferdams used to divert and control water during the original construction of the dam were flooded when the reservoir was allowed to fill, and would require removal to return the site to preconstruction conditions. To remove these structures, it is envisioned that a road would be constructed from the top of the excavated concrete dam and would ramp down to area of the cofferdams. The cofferdams are expected to be at least partially exposed by the erosive flushing of the reservoir. Some blasting would probably be necessary to remove one of the cofferdams, since the photographs indicate that fill concrete was probably placed in one cofferdam in lieu of the puddled earthen materials shown on the original construction drawings. The concrete, stones and boulders, and timber members of the cofferdams would be excavated and trucked to the spoil area. The temporary construction road would also allow access to the upstream area where logs and other debris have sunk to the bottom of the reservoir. Some of these logs would be removed, as necessary, to promote reservoir sediment erosion.

Surge Tank: The steel surge tank and its concrete foundations would be removed to eliminate a future public safety hazard. To allow demolition of the concrete foundation of the tank, drilling and blasting techniques would be used. The foundation and tank materials would be loaded into trucks and transported to the spoil area for burial.

Wood Stave Pipeline and Steel & Wood Penstocks: The existing 13.5 foot diameter, 5100 foot long wood stave pipeline and the 650 foot long steel and wood penstocks, would be removed along with their concrete foundations. All of these materials would be transported to the spoil area and buried. At the time of construction it may be economically feasible to recycle some of these materials, and transport them to an off site recycling firm. For example, the scrap steel from the penstock, surge tank, and steel bands and fittings of the wood stave pipeline could have value at the time of removal.

Site Preparations

Because the dam is located in a steep area, room for construction-demolition adjacent to the dam is limited. It is proposed that a ten-acre area be purchased and used for a site setup and staging area, a borrow pit and a spoil area. Site setup facilities would include an office trailer, equipment parts vans, equipment fueling and maintenance station, an equipment parking area and an explosives magazine site.

It is estimated that two to three thousand cubic yards of fill material may be required for the construction of access roads to various areas of the project. This material could be removed from this spoil area and later back filled as the construction site is reclaimed.

A significant volume of waste materials would be generated from the demolition of the dam and associated facilities. Estimated quantities of some of these materials are listed as follows:

- Concrete - over 45,000 cubic yards (broken volume)
- Wood Pipe Staves - over 6,000 cubic yards stacked
- Steel - over 400 tons
- Woody Reservoir Debris - from drained reservoir area (unknown quantity)

Certainly, some of this material could be hauled off and recycled dependant on the market economics of recycling at the time of construction. A fairly large area would be required to store, sort and transport this material for recycling.

Access Road Construction.

One of the first activities of the project would be construction of an access road to the spillway slab below the dam to permit excavation of the reservoir drain tunnel located at the base of the

dam. Access roads into the drained reservoir area would be used during removal of the cofferdams immediately upstream. Other access roads would be required for the removal of the 5100-foot long wood stave flowline.

REMOVAL PLAN SCHEDULE

An aggressive schedule has been developed to complete the dam removal project within one year. Certain criteria have been used to develop the schedule and includes the following:

- Work that affects water quality and quantity should be performed after October 1st. (US Fish & Wildlife Service, 21 January 1998 memo)
- The diversion dam used in the original construction of the dam should be removed prior to May 1st to allow fish passage. (US Fish & Wildlife Service, 21 January 1998 memo)
- Excavation of the 12 x 18 ft. drain tunnel at the base of the dam and the removal of low level concrete in the old river channel must be performed during low river flows (July through November)

The success of this schedule is dependent upon many factors that are difficult to predict such as actual river flows and weather conditions that would be encountered and the impact of buried wood debris in the reservoir. If significant wood debris is encountered, the speed of sediment erosion could be reduced and additional time may be required to handle the debris and to keep the drain tunnel through the dam open.